Temperature.	Vapour-density.	Observer.	Remarks.
About 1570°...	53	V. Meyer and Züblin	Nascent bromine from $PtBr_4$.
" " ...	80 to 52·6	"	Free bromine.
" " ...	63·4 to 64·7	Crafts	
(445°)	(75·7 instead of normal)	"	(To show the accuracy attained.)

It should be noted that in all these experiments the bromine was mixed with an indeterminate quantity of air, which makes them hardly comparable with our results.

"*Polytremacis* and the Ancestry of the Helioporidæ." By J. W. Gregory, D.Sc. Communicated by Professor Lankester, F.R.S. Received November 21,—Read December 7, 1899.

(Abstract.)

The recent blue coral *Heliopora* presents striking resemblances in structure to the palæozoic *Heliolites*. All the earlier writers on corals accordingly regarded the two genera as intimately allied. But some later authorities consider the resemblances as accidental, and that the corals have no special affinities. Thus, according to F. Bernard, *Heliopora* and *Heliolites* belong to distinct subphyla. Lindström admits only one species of *Heliopora*, and regards the genus as quite isolated, as essentially distinct in structure from *Heliolites*, and as further separated from the latter by "the total absence of all connecting links from the end of the middle Devonian to the recent times." The author, however, considers that the original view of the close affinity of *Heliopora* and *Heliolites* is correct, that the two genera are essentially similar in structure, and that they are linked by a series of eocene and cretaceous corals. Amongst these fossils is the genus *Polytremacis*, which is redescribed, and a new species of *Heliopora* from the Cretaceous of Somaliland. It is suggested that *Heliopora* has descended from the palæozoic Heliolitidæ by degeneration in size and increase in number of the cœnenchymal cæca.